



AF  
JFW

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Ex Parte Patent Application of

Kwok-Wai CHEUNG et al

Application No.: 09/917,639

Filed: July 31, 2001

For: SYSTEM FOR DELIVERING DATA  
OVER A NETWORK

) MAIL STOP APPEAL BRIEF -  
) PATENTS

) Group Art Unit: 2623

) Examiner: DOMINIC D.  
) SALTARELLI

) Confirmation No.: 1472

REPLY BRIEF

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Sir:

This Reply Brief is filed in response to points raised in the Examiner's Answer dated October 3, 2007.

**Claim 26**

In the main Brief, Appellants argue that the combination of the *Ganek* and *Kermode* patents do not establish a *prima facie* case of obviousness because (a) there is no reason to combine these patents in a manner that would lead to the claimed subject matter, and (b) modifying the system described in the *Ganek* patent by that of the *Kermode* patent would destroy the principle operation of the former.

In the discussion beginning on page 7 of the Answer, the Office rebuffs the Appellants arguments, first by alleging that the motivation to combine the references is to reduce buffer size. In doing so, however, the Answer presents an inconsistent argument. In the system of the *Ganek* patent, the buffer is used to store the content of one of the primary channels 101-106. (Column 4, lines 33-36; column 7, lines 4-6). In the purported combination of the references, the final rejection proposes that

the technique of the *Kermode* patent is applied to the secondary channels 107-115 of the *Ganek* patent. Consequently, any reduction in buffer size that might be achieved by the *Kermode* technique would only be realized in the buffering of those channels. However, the *Ganek* patent does not disclose any need to buffer a secondary channel. Rather, it is played back in real time as soon as the next one commences (column 7, lines 1-4).

The Answer does not explain how an application of the technique disclosed in the *Kermode* patent to the secondary channels of the *Ganek* patent would reduce the size of the buffer for the primary channel. The *Ganek* patent discloses that the size of that buffer is dictated by the length of the stagger time interval between primary channels, e.g., ten minutes (column 7, lines 36-38). Regardless of the manner in which the secondary channels are delivered, either as taught by *Ganek* or as taught by *Kermode*, that time interval will remain the same. Hence, the purported motivation for the combination of the references is inconsistent with their disclosures.

Second, the Answer contends that modifying the system described in the *Ganek* patent by the concepts disclosed in the *Kermode* patent does not affect the principle of operation of the *Ganek* patent. Appellants disagree.

Appellants' expound on its previous argument by noting that the *Ganek* patent discloses that a view box is configured so that it tunes to a secondary channel containing the nearest not yet commenced beginning portion of the requested video program, and concurrently tunes to the immediately previously commenced primary channel containing the requested video program and store it in a buffer (col. 7, lines 1-6). Thus, it would be readily apparent to one of ordinary skill that for the two channels allocated to the view box, one channel broadcasts the beginning portion of

the requested video and the other channel broadcasts the remaining or previously commenced portion of the requested video.

Turning to the *Kermode* patent, a receiver receives segments of video data from two channels at a time. For example, if a receiver is currently receiving data from channels  $m+2$  and  $m+3$ , the receiver will begin downloading a segment transmitted over channel  $m+4$  when the segment transmitted over channel  $m+2$  is fully received (col. 5, lines 59-67). Thus, the *Kermode* patent teaches a concept in which two channels are allocated to a receiver, where the data that is downloaded from both channels is stored in a buffer.

On page 8 of the Answer, the Office asserts that the *Ganek* patent can be modified by applying the Fibonacci sequencing scheme described in the *Kermode* patent to the "first 10 minute segment" (i.e., beginning portion) of data provided in the secondary channel. What the Answer fails to address, however, is why a person of ordinary skill would selectively apply this scheme to only the first 10-minute segment, and not the entire content. Appellants submit that a logical application of the teachings of the *Kermode* patent is to utilize the sequencing scheme over the total video. However, as pointed out previously, this modification would destroy the principle of operation of the *Ganek* patent. Because both documents disclose that data is downloaded from two channels at the same time, the *Ganek* patent cannot be modified by *the Kermode* patent so that it performs the data segmenting scheme described in the latter with respect to the beginning portion of the video program, and simultaneously store the remaining portion of the requested video program provided on the primary channel. In other words, to achieve the functionality purported through the alleged combination, the *Ganek* patent would either 1) require three

channels for downloading; two channels being allocated to the beginning portion of the video that is segmented according to the scheme of the *Kermode* patent, and the other channel being allocated to the remaining portion of the requested video that is stored in the buffer; or 2) abandon the downloading of a beginning portion and remaining portion of a requested video and totally adopt the segmenting scheme of the *Kermode* patent to download the entire video, since at any instant in time only two channels are allocated to the view box.

Appellants respectfully submit, however, that in either 1) or 2) above, modifying the system described in the *Ganek* patent by that of the *Kermode* patent would destroy the principle of operation of the former. Accordingly, despite the arguments presented in the Answer, the Office still fails to establish that one of ordinary skill would have reason to or be motivated to combine the applied references in the particular manner set forth in the rejection, i.e., to selectively use *Kermode's* scheme for only the secondary channels of *Ganek*. As such, Appellants' claims 26-32 are patentably distinct over the *Ganek* and *Kermode* patents.

### **Claim 31**

On page 11 of the Answer, the Office responds to Appellants' argument regarding claim 31 by asserting that the claim term "K" is neither limited nor clearly defined in the claim, and that a relationship between the terms "K" and "N" in the claimed term " $F_m \geq \frac{2K}{N}$ " is unnecessary. Appellants disagree, as it appears that the Office conveniently generalizes Appellants' claim terms for the benefit of supporting its position.

Each of the claim terms "F<sub>m</sub>", "K", and "N" are clearly defined in claim 26. For example, F<sub>m</sub> is the number of segments in an anti-latency data stream, K is the number of segments into the transmitted data is fragmented, and N is the number of interactive data streams. As such, the value of K cannot be any arbitrary positive whole number as alleged, as the value of K must be such that the claimed equation  $F_m \geq \frac{2K}{N}$  is satisfied. Moreover, one of ordinary skill would easily recognize that the ratio of "K" and "N" in the claimed equation defines clear boundaries for both of these terms, since the ratio inherently sets boundaries for which concurrent values of "K" and/or "N" are needed to satisfy the equation. Accordingly, the Office has failed to provide evidence to justify maintaining this rejection.

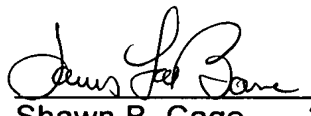
The remaining points presented in the Examiner's Answer are addressed in Appellants' main Brief, and therefore are not discussed further herein.

For the reasons presented in Appellants' Brief and this Reply Brief, the rejections of the claims are not supported by the cited prior art references.

Respectfully submitted,

BUCHANAN INGERSOLL & ROONEY PC

Date: December 3, 2007

By:  28632  
for Shawn B. Cage  
Registration No. 51522

P.O. Box 1404  
Alexandria, VA 22313-1404  
703 836 6620